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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/695,951	10/25/2000	Mark T. Cranna	010211.0045	4713	
21832 7	590 06/03/2003	·			
CUMMINGS AND LOCKWOOD			EXAMINER		
GRANITE SQ 700 STATE ST P O BOX 1960	reet		DEXTER, CLARK F		
NEW HAVEN, CT 06509-1960			ART UNIT	PAPER NUMBER	
			3724  DATE MAILED: 06/03/2003	12	

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary

Application No. 09/695,951

Applicant(s)

Cranna et al.

Examiner

Clark F. Dexter

Art Unit **3724** 

The MAILING DATE of this communication appears on the cover sheet with the correspondence address						
	or Reply					
THE N	A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.					
- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.						
- If NO p - Failure - Any rep	eriod for reply specified above is less than thirty (30) days, a reply within the eriod for reply is specified above, the maximum statutory period will apply a to reply within the set or extended period for reply will, by statute, cause th by received by the Office later than three months after the mailing date of to patent term adjustment. See 37 CFR 1.704(b).	nd will expire SIX (6) Note application to become	MONTHS from BANDON	n the mailing date of this communication. IED (35 U.S.C. § 133).		
Status	,					
1)💢	Responsive to communication(s) filed on Mar 19, 2	003		•		
2a) 💢	This action is <b>FINAL</b> . 2b) $\square$ This act	ion is non-final.				
3) 🗆	3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11; 453 O.G. 213.					
Disposit	ion of Claims					
4) 💢	Claim(s) <u>1-5, 7-14, and 21-47</u>			is/are pending in the application.		
4	a) Of the above, claim(s) 41-47			is/are withdrawn from consideration.		
5) 💢	Claim(s) <u>12-14</u>			is/are allowed.		
6) 💢	Claim(s) <u>1-5, 7-11, and 21-40</u>			is/are rejected.		
7) 🗆	Claim(s)			is/are objected to.		
8) 🗆	Claims	are	subject t	o restriction and/or election requirement.		
Applica	tion Papers					
9) 🗆	The specification is objected to by the Examiner.					
10)□	0)☐ The drawing(s) filed on is/are a)☐ accepted or b)☐ objected to by the Examiner.					
	Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).					
11)💢	The proposed drawing correction filed on	9, 2003 is:	а)💢 ар	proved b) $\square$ disapproved by the Examiner.		
	If approved, corrected drawings are required in reply t	to this Office act	on.			
12)	The oath or declaration is objected to by the Exami	ner.				
-	under 35 U.S.C. §§ 119 and 120					
13)□	13) Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).					
a) [	a) □ All b) □ Some* c) □ None of:					
•	1. Certified copies of the priority documents have been received.					
:	2. $\square$ Certified copies of the priority documents hav	e been received	in Appli	cation No		
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).						
_	ee the attached detailed Office action for a list of the					
14) Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).						
a) L The translation of the foreign language provisional application has been received.						
15) Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.						
Attachment(s)  1) Notice of References Cited (PTO-892)  4) Interview Summary (PTO-413) Paper No(s).						
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)		5) Notice of Informal Patent Application (PTO-152)				
3) Information Disclosure Statement(s) (PTO-1449) Paper No(s). 6) Other:						

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## **DETAILED ACTION**

1. The amendments filed November 27, 2002 and March 19, 2003 have been entered. It is noted that in view of the amendment practice under 37 CFR 1.121 which became effective for all amendments on March 1, 2001, and due to the limited amount of examining time per application, if the amendment contains changes to existing language that requires a marked-up version showing those changes, the Examiner is relying upon the <a href="marked-up version(s">marked-up version(s)</a> for examination of the application. It is applicant's responsibility to ensure that the clean version(s) is (are) the same as the marked-up version(s). It is further noted that the clean version(s) is (are) considered to be the Official version(s).

#### Election/Restriction

2. Claims 41-47 have been withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention (see applicant's remarks in the last paragraph on page 10 of the amendment filed November 27, 2002). Election was made without traverse in the response filed May 24, 2002 (paper no. 4).

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## **Drawings**

3. The proposed drawing correction and/or the proposed substitute sheets of drawings, filed on November 27, 2002 and March 19, 2003 have been **approved**. A proper drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The correction to the drawings will not be held in abeyance.

## Claim Rejections - 35 USC § 112

4. Claims 23 and 24 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 23, line 2, "a plurality of set teeth" is vague as to whether it refers to that previously set forth or to another such plurality (it is noted that a "twice amended" version was submitted with the amendment filed November 27, 2002, but no changes appear to have been made and no changes are shown in the marked-up version), and it is suggested to simply change "a plurality" to --the plurality-- or the like.

# Claim Rejections - 35 USC § 103

- 5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior

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art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claims 1-5, 7-11 and 21-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Clark, Re 31,433 (hereafter Clark '433), in view of Grelck, pn 820,969.

Clark '433 discloses a band saw with almost every structural limitation of the claimed invention but lacks a shelf located between the tip of each tooth and the bend plane. Grelck discloses a band saw a shelf (e.g., c, c1, c2; d1, d2) on each tooth and teaches that the shelves (i.e., projections) act as sawdust removers which remove saw dust as it is produced thus preventing the saw from becoming overheated. Therefore, it would have been obvious to one having ordinary skill in the art to provide such shelves on the band saw of Clark '433 at least for the benefits taught by Grelck. Conversely, it is noted that the claims are equally unpatentable over Grelck in view of Clark '433. The Examiner takes Official notice that it is old and well known in the art to set teeth to a maximum effective width by setting them from their base for various well known benefits including to attain desired cutting characteristics; for example, to provide for a wider kerf to reduce binding effects during cutting. Therefore, it would have been

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obvious to one having ordinary skill in the art to modify Grelck by setting the teeth from the base

of the saw teeth for the well known benefits including those described above.

Regarding claims 3, 4, 7-11, 21-26, 31-33, and 38-40, the combination lacks the specific

ratios and dimensions set forth including an explicit disclosure of the ratio S1/B within the range

of approximately 0.25 to approximately 0.75 as set forth in claim 38, and lacks an explicit

disclosure of the values of S1 and S2. However, the recited ratio, values and dimensions would

be the mere discovery of the optimum or workable ranges within the general conditions of the

prior art and therefore obvious to one having ordinary skill in the art.

Allowable Subject Matter

7. Claims 12-14 are allowable over the prior art of record.

Response to Arguments

8. Applicant's arguments filed March 19, 2003 have been fully considered but they are not

persuasive.

It is noted that the primary teaching of Grelck is that shelves can be provided on saw teeth

to remove saw dust. It is respectfully submitted that this teaching applies to saw teeth in general.

One benefit attained from such shelves is to that the tooth configuration can be altered, if desired,

to provide for a tooth configuration that makes a smaller kerf. However, one having ordinary

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skill in the art would clearly appreciate the benefit of having the shelf configuration on saw teeth in general since it is often desired to prevent build-up of saw dust in the saw.

#### Conclusion

9. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Clark Dexter whose telephone number is (703) 308-1404. The examiner's typical work schedule is Monday, Tuesday, Thursday and Friday, and he can be reached during normal business hours on these days.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Allan Shoap, can be reached at (703)308-1082.

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Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703)308-1148. The fax numbers Technology Center 3700 are: after-final responses - (703)872-9303; other formal/official papers - (703)872-9302. The fax number for informal/draft papers - (703)305-9835.

Clark F. Dexter Primary Examiner Art Unit 3724

cfd June 2, 2003